

Claims

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ART 34 AMDT.

1. A method for regenerating an NO<sub>x</sub> removal catalyst employed in a flue gas NO<sub>x</sub> removal apparatus, characterized in that the method comprises immersing the NO<sub>x</sub> removal catalyst at ambient temperature in regeneration water containing substantially no chlorine and no cleaning component; removing the catalyst from the regeneration water; and removing water from the catalyst.

2. A method for regenerating an NO<sub>x</sub> removal catalyst according to claim 1, wherein the NO<sub>x</sub> removal catalyst is immersed in regeneration water until bubbling stops.

3. A method for regenerating an NO<sub>x</sub> removal catalyst according to claim 1, wherein the NO<sub>x</sub> removal catalyst removed from the regeneration water is washed with water.

4. A method for regenerating an NO<sub>x</sub> removal catalyst according to claim 2, wherein the NO<sub>x</sub> removal catalyst removed from the regeneration water is washed with water.

5. A method for regenerating an NO<sub>x</sub> removal catalyst according to claim 1, wherein the regeneration water in which the NO<sub>x</sub> removal catalyst has been immersed is repeatedly used a plurality of times.

6. A method for regenerating an NO<sub>x</sub> removal catalyst according to claim 2, wherein the regeneration water in which the NO<sub>x</sub> removal catalyst has been immersed is repeatedly used a plurality of times.

7. A method for regenerating an NO<sub>x</sub> removal catalyst

according to claim 3, wherein the regeneration water in which the NO<sub>x</sub> removal catalyst has been immersed is repeatedly used a plurality of times.

8. A method for regenerating an NO<sub>x</sub> removal catalyst according to claim 4, wherein the regeneration water in which the NO<sub>x</sub> removal catalyst has been immersed is repeatedly used a plurality of times.

9. A method for regenerating an NO<sub>x</sub> removal catalyst according to any of claims 1 to 8, wherein the NO<sub>x</sub> removal catalyst having been regenerated is installed in the flue gas NO<sub>x</sub> removal apparatus without drying the catalyst before installation.

10. A method for regenerating an NO<sub>x</sub> removal catalyst according to any of claims 1 to 8, wherein the NO<sub>x</sub> removal catalyst having been regenerated is installed in the flue gas NO<sub>x</sub> removal apparatus after catalytic performance of the regenerated NO<sub>x</sub> removal catalyst is assessed.

11. A method for regenerating an NO<sub>x</sub> removal catalyst according to claim 9, wherein the NO<sub>x</sub> removal catalyst having been regenerated is installed in the flue gas NO<sub>x</sub> removal apparatus after catalytic performance of the regenerated NO<sub>x</sub> removal catalyst is assessed.

12. A method for regenerating an NO<sub>x</sub> removal catalyst according to any of claims 1 to 8, wherein the regenerated NO<sub>x</sub> removal catalyst is installed in the flue gas NO<sub>x</sub> removal apparatus such that the catalyst is inverted with respect to the direction of the flow of discharge gas.

13. A method for regenerating an NO<sub>x</sub> removal catalyst according to claim 9, wherein the regenerated NO<sub>x</sub> removal catalyst is installed in the flue gas NO<sub>x</sub> removal apparatus such that the catalyst is inverted with respect to the direction of the flow of discharge gas.

14. A method for regenerating an NO<sub>x</sub> removal catalyst according to claim 10, wherein the regenerated NO<sub>x</sub> removal catalyst is installed in the flue gas NO<sub>x</sub> removal apparatus such that the catalyst is inverted with respect to the direction of the flow of discharge gas.

15. A method for regenerating an NO<sub>x</sub> removal catalyst according to claim 11, wherein the regenerated NO<sub>x</sub> removal catalyst is installed in the flue gas NO<sub>x</sub> removal apparatus such that the catalyst is inverted with respect to the direction of the flow of discharge gas.